

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): An electrophotographic image forming apparatus comprising:
at least one image forming unit comprising:

an electrophotographic photoreceptor comprising:

an electroconductive substrate;

a charge generation layer disposed over the electroconductive
substrate; and

a charge transport layer disposed over the charge generation layer,

a charger for charging the electrophotographic photoreceptor;

an irradiator for irradiating the electrophotographic photoreceptor to form an
electrostatic latent image thereon;

an image developer for developing the electrostatic latent image with a
developer comprising a toner to form a toner image on the electrophotographic
photoreceptor; and

a transferer for transferring the toner image onto a transfer sheet while
applying an electrical current of not less than 65 μA to the electrophotographic
photoreceptor,

wherein the charge generation layer comprises titanylphthalocyanine crystals having a
 $\text{CuK}\alpha$ 1.542Å X-ray diffraction spectrum comprising plural diffraction peaks, wherein a
maximum diffraction peak is observed at a Bragg (2θ) angle of 27.2°; main peaks are
observed at 9.4°, 9.6° and 24.0°; and a minimum diffraction peak is observed at 7.3°; and no
diffraction peak is observed at an angle greater than 7.3° and less than 9.4°, wherein said
angles may vary by $\pm 0.2^\circ$ and the minimum interval where no peak is observed between
required peaks at 7.3 and 9.4 is 2.0 degrees absolute or more.

Claim 2 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the electrical current is controlled by a constant current controller.

Claim 3 (Original): The electrophotographic image forming apparatus of Claim 1, further comprising:

feedback means for returning a bypass current flow in the transferer to an electrical source; and

a current measurer for controlling the transfer current by measuring a difference between a current measured thereby and an output current from the electrical source.

Claim 4 (Original): The electrophotographic image forming apparatus of Claim 1, wherein no diffraction peak is observed at 26.3° .

Claim 5 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the titanylphthalocyanine crystals have an average primary particle diameter of less than $0.3\text{ }\mu\text{m}$.

Claim 6 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the charge generation layer is coated with a dispersion liquid comprising the titanylphthalocyanine crystals, and the titanylphthalocyanine crystals have a volume-average particle diameter of not greater than $0.3\text{ }\mu\text{m}$, and wherein the dispersion liquid is dispersed until a standard deviation of the volume-average particle diameter becomes not greater than $0.2\text{ }\mu\text{m}$ and the dispersion liquid is then filtered with a filter having an effective pore diameter of not greater than $3\text{ }\mu\text{m}$.

Claim 7 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the titanylphthalocyanine crystals are formed by a process comprising:

subjecting a titanylphthalocyanine, which is either amorphous or low-crystalline, and which has a maximum $\text{CuK}\alpha$ 1.542Å diffraction peak having a half width not less than 1° at a Bragg (2θ) angle of from 7.0 to $7.5^\circ \pm 0.2^\circ$ and an average primary particle diameter of not greater than $0.1 \mu\text{m}$, to crystal conversion with an organic solvent in the presence of water; and

separating the titanylphthalocyanine from the organic solvent before the titanylphthalocyanine crystals grow to a size where the titanylphthalocyanine crystals have an average primary particle diameter of greater than $0.3 \mu\text{m}$.

Claim 8 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the charge transport layer comprises a polycarbonate having a triarylamine structure in the main chain and/or the side chain.

Claim 9 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the electrophotographic photoreceptor further comprises a protection layer disposed over the charge transport layer.

Claim 10 (Original): The electrophotographic image forming apparatus of Claim 9, wherein the protection layer comprises an inorganic pigment and/or a metal oxide, and the inorganic pigment and metal oxide have a resistivity of not less than $10^{10} \Omega \cdot \text{cm}$.

Claim 11 (Original): The electrophotographic image forming apparatus of Claim 10, wherein the metal oxide is selected from the group consisting of alumina, titania and silica.

Claim 12 (Original): The electrophotographic image forming apparatus of Claim 10, wherein the metal oxide is α -alumina.

Claim 13 (Original): The electrophotographic image forming apparatus of Claim 9, wherein the protection layer further comprises a polymer charge transport material.

Claim 14 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the charge transport layer is formed with a non-halide solvent.

Claim 15 (Original): The electrophotographic image forming apparatus of Claim 14, wherein the non-halide solvent is selected from the group consisting of cyclic ethers and aromatic hydrocarbons.

Claim 16 (Original): The electrophotographic image forming apparatus of Claim 1, wherein an oxide film is formed on the electroconductive substrate by anodizing.

Claim 17 (Original): The electrophotographic image forming apparatus of Claim 1, comprising a plurality of the image forming units.

Claim 18 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the charger charges the electrophotographic photoreceptor while contacting the electrophotographic photoreceptor.

Claim 19 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the charger charges the electrophotographic photoreceptor while being located close thereto and a gap therebetween is not greater than 200 μm .

Claim 20 (Original): The electrophotographic image forming apparatus of Claim 1, wherein the charger applies a DC voltage overlapped with an AC voltage to the electrophotographic photoreceptor.

Claim 21 (Original): An electrophotographic photoreceptor comprising:
an electroconductive substrate;
a charge generation layer disposed over the electroconductive substrate; and
a charge transport layer disposed over the charge generation layer,
wherein the charge generation layer comprises titanylphthalocyanine crystals having a $\text{CuK}\alpha$ 1.542Å X-ray diffraction spectrum comprising plural diffraction peaks, wherein a maximum diffraction peak is observed at a Bragg (2θ) angle of 27.2°; main peaks are observed at 9.4°, 9.6° and 24.0°; and a minimum diffraction peak is observed at 7.3°; and no diffraction peak is observed at an angle greater than 7.3° and less than 9.4°, wherein said angles may vary by $\pm 0.2^\circ$ and the minimum interval where no peak is observed between required peaks at 7.3 and 9.4 is 2.0 degrees absolute or more.

Claim 22 (Original): The electrophotographic photoreceptor of Claim 21, wherein no diffraction peak is observed at 26.3°.

Claim 23 (Original): The electrophotographic photoreceptor of Claim 21, wherein the titanylphthalocyanine crystals have an average primary particle diameter of less than 0.3 μm .

Claim 24 (Original): The electrophotographic photoreceptor of Claim 21, wherein the charge generation layer is coated with a dispersion liquid comprising the titanylphthalocyanine crystals, and the titanylphthalocyanine crystals have a volume-average

particle diameter not greater than 0.3 μm , and wherein the dispersion liquid is dispersed until a standard deviation of the volume-average particle diameter becomes not greater than 0.2 μm and the dispersion liquid is then filtered with a filter having an effective pore diameter of not greater than 3 μm .

Claim 25 (Original): The electrophotographic photoreceptor of Claim 21, wherein the titanylphthalocyanine crystal is formed by a process comprising:

subjecting a titanylphthalocyanine, which is either amorphous or low-crystalline, and which has a maximum $\text{CuK}\alpha$ 1.542Å diffraction peak having a half width not less than 1° at a Bragg (2θ) angle of from 7.0 to $7.5^\circ \pm 0.2^\circ$ and an average primary particle diameter not greater than 0.1 μm , to crystal conversion with an organic solvent in the presence of water; and

separating the titanylphthalocyanine from the organic solvent before the titanylphthalocyanine crystals grow to a size where the titanylphthalocyanine crystals have an average primary particle diameter of greater than 0.3 μm .

Claim 26 (Original): The electrophotographic photoreceptor of Claim 21, wherein the charge transport layer comprises a polycarbonate having a triarylamine structure in the main chain and/or the side chain.

Claim 27 (Original): The electrophotographic photoreceptor of Claim 21, further comprising a protection layer disposed over the charge transport layer.

Claim 28 (Original): The electrophotographic photoreceptor of Claim 21, wherein the protection layer comprises an inorganic pigment and/or a metal oxide, and the inorganic pigment and metal oxide have a resistivity of not less than $10^{10} \Omega \cdot \text{cm}$.

Claim 29 (Original): The electrophotographic photoreceptor of Claim 28, wherein the metal oxide is selected from the group consisting of alumina, titania and silica.

Claim 30 (Original): The electrophotographic photoreceptor of Claim 28, wherein the metal oxide is α -alumina.

Claim 31 (Original): The electrophotographic photoreceptor of Claim 21, wherein the protection layer further comprises a polymer charge transport material.

Claim 32 (Original): The electrophotographic photoreceptor of Claim 21, wherein the charge transport layer is formed with a non-halide solvent.

Claim 33 (Original): The electrophotographic photoreceptor of Claim 32, wherein the non-halide solvent is selected from the group consisting of cyclic ethers and aromatic hydrocarbons.

Claim 34 (Original): The electrophotographic photoreceptor of Claim 21, wherein an oxide film is formed on the electroconductive substrate by anodizing.

Claim 35 (Original): The electrophotographic image forming apparatus of Claim 1, further comprising a detachable cartridge comprising a photoreceptor and a member selected from the group consisting of chargers, irradiators, image developers, cleaners, and combinations thereof.

Claim 36 (New): The electrophotographic image forming apparatus of Claim 1, wherein the titanylphthalocyanine crystals are free from halogenation.

Claim 37 (New): The electrophotographic image forming apparatus of Claim 21,
wherein the titanylphthalocyanine crystals are free from halogenation.